

GM SERIES
ELECTRONIC WEIGHING SCALE

OPERATION MANUAL

PLEASE READ THIS MANUAL VERY CAREFULLY
BEFORE ATTEMPT TO OPERATE THE SCALE

CONTENTS

1. INTRODUCTION

2. INSTALLATION

3. EXPLANATIONS

4. OPERATIONS

5. CALIBRATION

6. CARE AND MAINTENANCE

7. WARRANTY

AUGUST 1999 REV 2

*Specifications subject to change without prior
notice*

1. INTRODUCTION

Congratulation for choosing an excellent digital weighing scale.

Reliable and accurate, the GM series is ideal for supermarkets, grocery stores, food service shops, or retail stores.

The GM series has been designed to be easy-to-use, durable, and portable, with an standard sealed type rechargeable battery and matching AC adaptor rear display and back-lighting capabilities are available as option.

Power Consumption	AC/DC(rechargeable battery) 6V operated DC, 40mA/hr
Packing Weight	N. WT. 3.5kg G. WT. 4.5kg
Tare range	Full capacity
AC adaptor	Input: AC 110/220V +/- 10%, 50-60Hz Output:DC9V/500mA
Option	1. Rear side display 2. Back-lighting facility 3. Leveling facility 4. RS-232C/ Printer Interface
Operating Temperature	0°C ~ 40°C(32 ~ 104°F)

1.1 Models & Specifications:

Model	Capacity	Increment	Accuracy
GM-3000	3000g	1g	
GM-6000	6000g	2g	1/3000
GM-15K	15kg	0.005kg	
GM-30K	30kg	0.01kg	
GM-1100	1100g	0.1g	1/11000
GM-11K	11kg	1g	

2. INSTALLATION

2.1 Unpacking:

Unpacking the scale carefully, within this package you will find:

- a. This manual
- b. The GM scale
- c. The platter
- d. The adaptor(9V/500mA)
- e. The dust cover

NOTE: Do not dispose of the box or packing materials, since they may be useful in the future when long-range transportation is called for.

2.2 Optimal installation requirements:

For optimal results we recommend that you install the scale at a location that provides for the following:

- a. A level surface
- b. Stable and/ or not subject to vibration
- c. Not exposed to direct sunlight
- d. Away from areas containing corrosive gas
- f. Dust-free

- f. Temperature 0°C - 40°C
- g. Humidity < 95% RH (Do not install near a humidifier)
- h. Away from other electronic equipment to avoid interference. If a leveling bubble is included, center the bubble with the leveling feet before using the GM scale. Follow the precautions outlined below on the safe use of electrical power sources. Connect the GM to the local power source and charge the battery completely, while the display is switched off. Be sure that the scale is safely out of the way while it is charging.

2.3 Precautions:

Warning!! Do not attempt any troubleshooting or maintenance other than that mentioned in this manual.

Do not open the scale enclosure for any reason, and expose the delicate electronic components.

NOTE:

Refer all servicing to qualified personnel at an authorized dealership only. Otherwise, the

warranty may be invalidated.

Safe use of Power Sources:

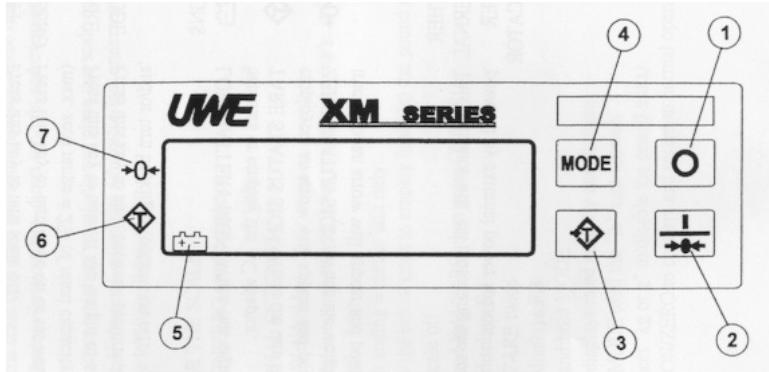
Check that the voltage requirement for the AC adaptor are provided, but not exceeded, by the local power supply.

Insert the adaptor plugs securely into a power socket first, then the receptacle on the right-bottom side of the scale.

Avoid connecting other equipment to the same socket. Secure the adaptor cord such that it will not be stepped on or pulled, if possible. If an extension cord must be used, it should have a equal to or exceeding that of a suitable power source.

3. EXPLANATION

3.1 Keypads & Displays:



1. OFF KEY

Press this key to turn scale off.

2. ON/ZERO KEY

Press this key to turn scale on or set weight to zero when unloaded.

3. TARE KEY

Press this key to tare off the weight of a container.

4. MODE KEY

Press this key to switch among metric and avoirdupois weight units with or without

backlight (optional).

5. LO-BAT INDICATOR

When this indicator appears:

- a. **For dry battery version:** replace the batteries with new ones, or apply the power adaptor immediately.

CAUTION:

When the power adaptor is being used, take out all the batteries from the battery pack.
Fail to do so may cause battery leak/explosion or damages to the scale.

- b. **For built-in rechargeable battery version:**

Apply the power adaptor and recharge the scale immediately. Fail to do so may cause unrecoverable damages to the rechargeable battery inside scale.

6. TARE INDICATOR

An arrow will appear and point at this sign to indicate the tare function is in operation and weight displayed is net weight.

7. ZERO INDICATOR

An arrow will appear and point at this sign to indicate a zero weight status.

IN-CHARGE INDICATOR (BUILT-IN RECHARGEABLE BATTERY VERSION)

This indicator is located at the left-hand side of the scale. Charging status IS displayed by different colors:

Red: Recharging battery
Green: Charging completed

4. OPERATIONS

4.1 Routine operation:

- a. Switch power on. The unit will begin a self-testing sequence. The scale is ready for use when the display zeros. The measuring unit for the weighing value will be in kilograms initially.
- b. Press the "**MODE**" key to select the desired measuring unit.(kilograms or pounds)
- c. If there is a container placed on the platter, press "**TARE**" key to subtract the weight of the container previously.
- d. Start to weight.

*** Optional back-lighting facility**

Press "**MODE**" key, there are 4 modes to be switch over in sequence.(kilograms without back-light ---> pounds without back-light ---> kilograms with back-light---> pounds with back-light)

4.2 Operation notes:

Grounding:

Ground the instrument properly to protect the instrumentation from power surges. This can be done by using a suitable adaptor transformer with a third ground terminal. Any method of grounding should comply with local electrical regulations. Do not ground the GM to gas pipes, water pipes, or to telephone plugs.

Warm-up period

For best results, a minimum 10-minute period of disuse prior to operation is highly recommended.

Enabling and disabling the Auto shut-off mechanism

When the scale is turn on, the auto shut-off mechanism is set at four minutes. To disable or to enable again this power-saving function, follow these instructions:

- a. Press the "**OFF**" key.
- b. Press and hold the "**TARE**" key.
- c. Press the "**ON/ZERO**" key, the display will show "**F1**".
- d. Press "**TARE**" key to switch the display to "**F4**". Then press "**MODE**" key, the display will read "**4-OFF**" or "**0-OFF**".
- e. Press the "**MODE**" key to switch between the

two modes.

- f. Press "ON/ZERO" to reset the scale for normal operation.

Handling the scale

Despite the sturdy appearance of the scale, each unit houses sensitive instrumentation which may be damaged by careless handling of the scale. Use both hands when transporting the scale with at least one hand under the scale. (This will be routinely required if the charging site for the rechargeable battery is not the same as the operation location.)

Placing a load

Always place a commodity gently on the platter. Sudden shocks will damage the weighing sensor irreparably. Careful attention to avoiding shocks will extend the life of the sensor. For best results, do not leave loads on the platter for prolonged periods, as this may impair the functioning of the weighing sensor, afterwards.

Handling the plug

Disconnect the cord by the pulling on the plugs only, never the cord itself.

Exposure to liquids

Only clean the scale in a manner prescribed by the instructions below.

Should water or another liquid seep into the enclosure, unplug the unit and have it checked by your qualified personnel before operating it any further.

Care should be taken when drinking beverages near the scale, and when placing beverage containers on or near the scale.

Thunderstorms

The GM is equipped with a lightning protection circuit which can prevent about 90% of the damage typically caused by lightning. The effectiveness of the circuit depends on how well grounding the instrument is.

However, during severe electrical storms it is strongly advisable that the scale be switched off and that the adaptor be completely disconnected from the local power source.

Long-term storage

Charge the battery fully for an uninterrupted eight hours. Be sure that there are no load left on the platter. Clean and cover the scale.

5. CARE AND MAINTENANCE

- a. Do not subject the commodity platter to sudden shocks.
- b. Clean the cover and commodity platter with a soft damp cloth and mild detergent. Do not sue harsh abrasives.
- c. Do not submerge the scale in water and do not pour splash or spray water directly on it.
- d. Do not use acetone or other volatile solvents for cleaning.
- e. In order to prolong the battery life, please refrain from using any longer before recharging when  (low battery sign) appears.